

United States Patent and Trademark Office

Ful

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,904	11/18/2003	Show-Nan Chung	CHUN 3064/EM	3981
23364	7590 10/03/2006		EXAMINER	
BACON & THOMAS, PLLC			NGUYEN, KIMNHUNG T	
625 SLATERS				
FOURTH FLOOR			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22314			2629	

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

1.2		Application No.	Applicant(s)				
Office Action Summary		10/714,904	CHUNG ET AL.				
		Examiner	Art Unit				
		Kimnhung Nguye					
Period fo	The MAILING DATE of this communication r Reply	appears on the cover	sheet with the correspondence a	address			
WHIC - Exter after - If NO - Failu Any	CRTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING asions of time may be available under the provisions of 37 CFI SIX (6) MONTHS from the mailing date of this communication period for reply is specified above, the maximum statutory pere to reply within the set or extended period for reply will, by steply received by the Office later than three months after the made patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS CO R 1.136(a). In no event, howe indo will apply and will expire satute, cause the application to	MMUNICATION. Iver, may a reply be timely filed SIX (6) MONTHS from the mailing date of this become ABANDONED (35 U.S.C. § 133).	•			
Status							
1)	Responsive to communication(s) filed on 1.	8 November 2003					
•	Responsive to communication(s) filed on <u>18 November 2003</u> . This action is FINAL . 2b) This action is non-final.						
,	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
٠,٠	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	·	, , ,	• • • • • • • • • • • • • • • • • • • •				
	Disposition of Claims						
•	Claim(s) <u>1-9</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
	☑ Claim(s) is/are allowed. ☑ Claim(s) <u>1-6</u> is/are rejected.						
· -	Claim(s) <u>7-9</u> is/are rejected. Claim(s) <u>7-9</u> is/are objected to.						
· -	Claim(s) <u>7-9</u> is/are objected to. Claim(s) are subject to restriction an	d/or alaction requirer	mont				
		azor election requirer	nent.				
Applicati	on Papers						
9)[The specification is objected to by the Exam	niner.					
10)[Γhe drawing(s) filed on is/are: a) ☐ a	accepted or b)⊡ obje	ected to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	Replacement drawing sheet(s) including the cor	rection is required if the	drawing(s) is objected to. See 37 (CFR 1.121(d).			
11) 🗌	The oath or declaration is objected to by the	Examiner. Note the	attached Office Action or form F	PTO-152.			
Priority u	nder 35 U.S.C. § 119						
a)[Acknowledgment is made of a claim for fore ☑ All b) ☐ Some * c) ☐ None of:		.,,,,,				
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
	3. Copies of the certified copies of the p			al Stage			
	application from the International Bur	,	• • •				
* S	ee the attached detailed Office action for a	list of the certified co	pies not received.				
Attachment	•	_					
	e of References Cited (PTO-892)		nterview Summary (PTO-413)				
_	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08)		Paper No(s)/Mail Date Notice of Informal Patent Application				
	No(s)/Mail Date	·	Other:				

DETAILED ACTION

This application has been examined. The claims 1-9 are pending. The examination results are as following.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1 and 3-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Wolfe et al. (US 6,037,930).

As to claim 1, Wolfe et al. discloses in figs. 2, 3, a reading control device (circuit 3, see col. 6, lines 3-8) for a four-line resistive touch panel including first and second conducting plates (x+, Y+, fig. 3) wherein the reading control device is electrically energized to alternately apply voltage to both the first and second conducting plates so that a discharge is performed on the conducting plate not being electrically energized and an activation voltage is next read from the discharged conducting plate, thereby obtaining correct location data from the activation voltage (see col. 6, lines 45-55).

As to claim 3, Wolfe et al. discloses further, wherein the first conducting plate comprises two edges of X (+) and X (-) and the second conducting plate comprises two edges of Y (+) and Y (-) respectively.

Art Unit: 2629

As to claim 4, Wolfe et al. discloses further, comprising a bus including four lines each electrically coupled to one of the edges X (+), X (-), Y (+), and Y (-) (see interface connector of fig. 17B)

As to claim 5, Wolfe et al. discloses further, comprising a reading control circuit including two ground circuits (see grounds of fig. 17B) for an inherent discharging.

As to claim 6, Wolfe et al. discloses further, wherein the reading control circuit further includes a plurality of switch transistors (Q1, Q2, Q3, Q4, fig. 5), two of the switch transistors being operative to couple to the ground circuits (see Q3, Q4 connected to grounds, fig. 5) so That each switch transistor associated with the ground circuit is adapted to switch between the discharge via the coupled ground circuit or the activation voltage reading.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfe et al. (US 6,037,930) in view of Chan (US 5,283,558).

Wolfe et al. discloses every feature of the claimed invention as discussed above, excluding comprising a resilient member made of dielectric insulating material between the first and second conducting plates. Chan discloses in fig. 1, a touch control by using a matrix of X and Y by using of dielectric layer such as plastic membrane or paper sheet with adhesive metal

Art Unit: 2629

strips between the two plates (see terminal resistances Rx16 and Ry17 or first and second plates, see col. 7, lines 12-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using dielectric layer such as plastic membrane or paper sheet with adhesive metal strips between the two plates as taught by Wolfe et al. into the control device four-line resistive touch panel of Wolfe et al. for producing the claimed invention because this would provide to the user the way of using insulating layers such as plastic membrane or paper sheet with adhesive metal strips or wires which leads to low-cost manufacturing (see col. 7, lines 31-33).

Allowable Subject Matter

- 5. Claims 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 6. The following is a statement of reasons for the indication of allowable subject matter:

 None of the cited art teaches or suggests that wherein the voltage is alternately applied to each of the first and second conducting plates via the correspondence line of the bus so as to conduct the corresponding switch transistor for discharging the conducting plate not being electrically energized via the coupled ground circuit and read the activation voltage from the discharged conducting plate, thereby obtaining correct location data from the activation voltage as claims 7-9.

Application/Control Number: 10/714,904 Page 5

Art Unit: 2629

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698.

The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Richard Hierpe can be reached on (571) 272-7691. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimnhung Nguyen September 28, 2006

> SUPERVISORY PATENT EXAMINER AECHMOI GRA, Canales con